

### *Amendments to the Claims*

The listing of claims will replace all prior versions, and listings of claims in the application.

Claims 1-27. (Canceled)

Claim 28. (Withdrawn)      A method for detecting the presence of *Chlamydia* in a test sample comprising the steps of:

(1)      contacting said test sample with the antibody or fragment thereof of claim 29, 42, or 50 for a time sufficient to allow said antibody or fragment thereof to bind *Chlamydia* and to form a *Chlamydia*:anti-*Chlamydia* antibody immunocomplex and;

(2)      either detecting the presence of or measuring the amount of said immunocomplexes formed during step (1) as an indication of the presence of said antibody or fragment thereof in the test sample.

Claim 29. (Currently Amended)      An isolated antibody or antigen-binding fragment thereof which specifically binds to a polypeptide consisting essentially of ~~an amino acid sequence at least 95% identical to~~ amino acids 29-1012 of SEQ ID NO: 2.

Claim 30. (Canceled)

Claim 31. (Currently Amended)      The antibody or fragment thereof of claim 29, ~~wherein said amino acid sequence consists of~~ which further specifically binds to a polypeptide consisting essentially of amino acids 29-1013 of SEQ ID NO: 15.

Claim 32. (Currently Amended)      The antibody or fragment thereof of claim 29, ~~wherein said amino acid sequence consists of~~ which further specifically binds to a polypeptide consisting essentially of amino acids 29-1013 of SEQ ID NO: 16.

Claim 33. (Currently Amended) The antibody or fragment thereof of claim 29, wherein said ~~amino acid sequence~~ polypeptide is encoded by SEQ ID NO: 1.

Claim 34. (Currently Amended) The antibody or fragment thereof of claim 29 31, wherein said ~~amino acid sequence~~ polypeptide is encoded by SEQ ID NO: 23.

Claim 35. (Currently Amended) The antibody or fragment thereof of claim 29 32, wherein said ~~amino acid sequence~~ polypeptide is encoded by SEQ ID NO: 24.

Claim 36. (Previously Presented) The antibody or fragment thereof of claim 29, which is polyclonal.

Claim 37. (Previously Presented) The antibody or fragment thereof of claim 29, which is monoclonal.

Claim 38. (Previously Presented) The antibody or fragment thereof of claim 29, which is humanized.

Claim 39. (Previously Presented) The antibody or fragment thereof of claim 29, which is chimeric.

Claim 40. (Previously Presented) The antibody or fragment thereof of claim 29, which is fully human.

Claim 41. (Previously Presented) The antibody or fragment thereof of claim 29, which is selected from the group consisting of an Fv fragment, a single chain Fv fragment (scFv), a F(ab')<sub>2</sub> fragment, a Fab fragment, a single chain antibody, and a complementarity determining region (CDR).

Claim 42. (Currently Amended) ~~An isolated~~ The antibody or antigen-binding fragment thereof of claim 29, which further specifically binds to a polypeptide consisting essentially of an amino acid sequence ~~at least 95% identical to the amino acid sequence~~

encoded by the *Chlamydia trachomatis* insert in plasmid pJJ36-J from *E. coli* TOP10 (pJJ36-J).

Claim 43. (Canceled)

Claim 44. (Previously Presented)      The antibody or fragment thereof of claim 42, which is polyclonal.

Claim 45. (Previously Presented)      The antibody or fragment thereof of claim 42, which is monoclonal.

Claim 46. (Previously Presented)      The antibody or fragment thereof of claim 42, which is humanized.

Claim 47. (Previously Presented)      The antibody or fragment thereof of claim 42, which is chimeric.

Claim 48. (Previously Presented)      The antibody or fragment thereof of claim 42, which is fully human.

Claim 49. (Previously Presented)      The antibody or fragment thereof of claim 42, which is selected from the group consisting of an Fv fragment, a single chain Fv fragment (scFv), a F(ab')<sub>2</sub> fragment, a Fab fragment, a single chain antibody, and a complementarity determining region (CDR).

Claim 50. (Currently Amended)      An isolated antibody or antigen-binding fragment thereof which specifically binds to a polypeptide consisting essentially of an amino acid sequence ~~at least 95% identical to the amino acid sequence~~ encoded by the *Chlamydia trachomatis* insert in plasmid pAH342 from *E. coli* BL21 (pAH342).

Claim 51. (Canceled)

Claim 52. (Previously Presented)      The antibody or fragment thereof of claim 50, which is polyclonal.

Claim 53. (Previously Presented)      The antibody or fragment thereof of claim 50, which is monoclonal.

Claim 54. (Previously Presented)      The antibody or fragment thereof of claim 50, which is humanized.

Claim 55. (Previously Presented)      The antibody or fragment thereof of claim 50, which is chimeric.

Claim 56. (Previously Presented)      The antibody or fragment thereof of claim 50, which is fully human.

Claim 57. (Previously Presented)      The antibody or fragment thereof of claim 50, which is selected from the group consisting of an Fv fragment, a single chain Fv fragment (scFv), a F(ab')<sub>2</sub> fragment, a Fab fragment, a single chain antibody, and a complementarity determining region (CDR).

Claim 58. (Currently Amended)      An antiserum comprising the antibody or fragment thereof of claim 29, wherein said antiserum is produced by a method comprising (1) administering to an animal a polypeptide consisting essentially of an ~~amino acid sequence 95% identical to~~ amino acids 29-1012 of SEQ ID NO: 2 and (2) recovering the antiserum from said animal.

Claim 59. (Previously Presented)      A method for detecting the presence of *Chlamydia* in a test sample comprising the steps of:

(1) contacting said test sample with the antiserum of claim 58 for a time sufficient to allow the antibody or fragment thereof to bind *Chlamydia*, and to form a *Chlamydia*:anti-*Chlamydia* antibody immunocomplex and;

(2) either detecting the presence of or measuring the amount of said immunocomplexes formed during step (1) as an indication of the presence of said antibody or fragment thereof in the test sample.